How the Universe Functions

WARNING: I'm a seer, not a scientist; I'm an entertainer, not an expert. With a sword.

Abstract

We think of life-and-death as the main game being played in the universe, but it's not. It's just a clever strategy for *trying to win* the game. Non-living things are playing exactly the same game we are, but their strategy is "hold tight". The rock is doing its very best to hold itself together given the onslaught of everything that it comes into contact with. Before life came along, "hold tight" was the only strategy in town.

"Hold tight" *kicked off* life by managing to hack the game with a two step process: (Step 1) Hold tight *as a sack* with loose pieces inside the sack that zip around randomly combining and recombining, and (Step 2) Wait very patiently until one of those recombinings manages to spit out *a copy* of the sack *and* its contents. Once that happened, it recursed, and the resulting life form could stay one step ahead of the game in a way the rock can't. It could pass itself as a baton, repeatedly forever. So, in the long run, the life form watches the rock turn to sand and eventually disappear altogether.

But regardless of strategy, **what exists is what has survived being broken apart**. Literally everything around you is a winner, somehow still in the game several billions of years into it. This idea should trigger exactly the same mind bender that thinking about your long line of ancestors does. Somehow, every single one of them managed to get laid! And cause a pregnancy that resulted in a child that survived to repeat the cycle. Not a single slip up since life began. Consider the endless morbid maze of childhood accidents and diseases and predators that your ancestors managed to slither themselves through.

So, what can we say about the smallest, most insignificant speck of dust in the universe? *Winner!* Just like you, beyond all conceivable odds, it's here. It *exists*.

If we can get our heads around this idea, the idea that everything in the universe is a perfect fit for its time and place, is exactly as it needed to be to be here at all, and is not just sitting there helpless and broken waiting for humans to figure out how to fix it—if we can *respect* it for its brilliance at the game so far—then we'll be in a better position to understand it and work with it.

Bureaucracy, for example, is a thing of beauty. There simply is no better way of managing the affairs of very large groups of people, or it would have emerged and been copied. Bureaucracy has survived all over the world, across all cultures, for all of recorded history. Technology doesn't *tolerate* bureaucracy, it *stands on its shoulders*.

Sneer at your own expense. When you do, you're blind to how the universe works. Our pet plans to someday fix bureaucracy is a joke so cosmically hysterical that the universe belly

laughs at us. The enormity of the complexity contained in the behavior of humans in large groups is a lake so bottomless that the human mind barely breaks the surface of it. Ask any economist. Economies crash like earthquakes hit. The economists have *no idea* when the economy is about to crash. They never have and they never will—without a *gargantuan* computer. Our best AI today can see about a millimeter deeper down into that lake. And what it sees is gross probabilities.

As a Game

It's easiest to learn the basics of the universe by conceiving of it as an *actual* game. The analogy won't be perfect, of course, but it will be damn close, and good enough for us to reason our way around with.

The Stadium

The game is played inside a stadium which is essentially an expanding balloon. Before the game begins, the stadium is small and empty, but once the game starts, air will be continually pumped into it. It will never stop expanding and it will never pop.

It's not exactly air that's being pumped in, of course, but rather *space*—space that air molecules sit inside of. But this is a mere detail. Feel free to think of it as air for now if you like.

The Players

Players are also being continually pumped into the expanding stadium through the same inlet. The number of players in the game is beyond astronomical, but the important point is that there's more than enough space being pumped in for all the players to move around freely.

The players are also incredibly tiny. There are ~1,000,000,000,000,000 (about 1 crapton) of them in a single grain of sand. But the rules are the same regardless of number of players, so don't let the big numbers bother you one bit.

As we'll soon see, players can become attached to other players, as they are in the grain of sand, but when they're completely *un*attached, they travel at the maximum speed allowed inside the stadium. And their energy supply never runs out. This is the genius in the game. Players *do* slow down, but only when they attach to other players to form a group. The greater the number of players in a group, the slower the group goes.

We can now distinguish between space and air. Space is emptiness capable of containing players. Air is lots of very tiny groups of players (atoms and molecules) zipping around *inside* space. The air is invisible only because the groups that comprise it are too small (and too fast) for humans to see, but they're there. Much of outer space has no groups of players in it at all, apparently, so it has no air, just space.

We don't know or care what happens when a player or player group contacts the edge of the stadium, if it even can. We'll just assume it just ricochets off.

Attachment

There are two types of attachment, snapping and clumping. Both can be thought of as types of magnetism.

Snapping

Snapping is like our normal positive/negative (+/-) magnetism, but multi-tiered. If there were no tiers, all the players would coalesce into spherical clumps. But *with* teirs, there are restrictions regarding which player (groups) can attach to which other player (groups), and the result is all the various shapes you see around you. The tiers are few and simple, but the combinatorics they engender result in an explosion of sizes and shapes of the player groups.

When two solo players snap to each other, each contributes some of the energy it was using to zip around (at maximum speed) to form the bond that keeps the pair attached. That bond physicists call ***matter***, but I'm going to call it (snapping) ***glue***.

Clumping

The snapping glue is also magnetic—to itself! This is the clumping magnetism. Instead of the binary plus/minus (+/-) magnetism, glue is mono-magnetic: all glue has a magnetic pull in all directions to all other glue in its vicinity. This causes all player groups to be squeezed *inward* by the very glue that's being used to build them *outward*!

Collapsing

There's a tipping point at which there's so much glue in an object that there's no energy left for it to move. All the energy is tied up in the locks holding it together. When that happens, the glue's attraction to itself completely overpowers its own ability to support the snapping infrastructure it's built. The entire group of players collapses in on itself, and all those players are removed from the game. Losers.

Clumping Without Snapping

Players that can't snap together because of a snapping tier mismatch can still clump. You yourself are clumped to the earth, not snapped to it. All the glue in the earth is pulling on all the glue in you. And vice versa.

Glue Lifetime

The snapping glue slowly wears out. Over long periods of time, the energy trapped inside the glue escapes. As it does, players—or small groups of them—wriggle free and shoot out like little bullets, as you might expect they would. Some of the little bullets move so fast that they can do damage to the things they crash into, like the cells in your body. With the loss of each bullet, the group that lost it grows a bit smaller and a bit faster.

Winning the Game

The game ends when only one two-player group is left in the stadium. Those two players are declared the winners. All other players are unattached and therefore losers.

So the name of the game is “get attached and stay attached”.

But not *too* attached. As we saw, there’s a second way to lose. If a group gets too *big*—if it has too many players in it—the whole group drops out of the game and all the players in the group are losers. This is a black hole.

And That’s It!

That’s how the universe works. There’s nothing more to it except for the descriptions of the infinite details of all the crazy interesting things (like you and me and Slippin Fall) that end up getting snapped and clumped together (and surviving) when there’s billions of years for it all to snowball on itself.

Over time, the groups get bigger, and the complexity inside them grows deeper, but it’s all driven—*at all levels of reality, and at all times*—by the same simple, competitive clumping and snapping of the zillions of tiny, restless players inside the expanding stadium.

Which means that we’re now ready to explain what love is, what war is, what Donald Trump is! All three of them—and everything else in the universe—is unfathomably deep snapping and clumping of tiny little magnets. There’s nothing else they *can* be.

Strategy

So, if you were a player in this game, one of the tiny bullets of magnetic energy, you wouldn’t have any *say* in what happened to you, of course—it’s all rule driven—but if you *did*, your strategy would be to join the best group you could. You’d be looking for a group that (wasn’t so big it was on the verge of collapse and) didn’t break apart easily given all the other groups around it. Different neighborhoods contain different sets of groups, so it’s not as straightforward as it may seem.

For any given group to survive, it must defend itself against all groups it comes into contact with, regardless of size. A very *large* group of players, like a human being, which is composed of several gazillion players, must defend itself against bacteria as well as blizzards—and everything in between.

Do you see natural selection in play here, across *all* of existence, not just the living things? Everything is “fighting” to keep from being broken apart. The things that get broken apart fail to continue to exist. The blade of existence is therefore continually being sharpened.

All things that exist in the game (and in the universe) are groups of players that are best at surviving collisions in their particular neighborhoods. I’m using “collisions” liberally here

to represent all the ways in which groups come into contact with each other, be it biting, burrowing, bumping, or whatever.

Bureaucracy (our example from the Abstract) delicately adjusts its levels and types of corruption to optimize the group it serves. The official rules of the bureaucracy that the-humans-in-charge managed to cobble together—with tremendous and well-intentioned effort, mind you—are in no way up to the task of coordinating the affairs of that large a group. The complexity is just too great. The rules the committee comes up with always constitute a clunky and scraping rational engine doomed to chronic economic breakdown. But then corruption emerges from it, *as an optimization*; it's the grease that gets the ramshackle engine to its optimal efficiency. There *are* no bureaucracies *without* corruption, and never have been, and never will be, because they're all too inefficient to survive without it. In other words, if the best rules humans can design for a large group are actually strictly followed, that group loses wars. Things that don't exist don't exist for a reason. It's not that the universe was too stupid to try them. They almost certainly *were* tried if they were in the mutation neighborhood, *and they failed*. The politician that comes into city hall and actually "eradicates corruption" also crashes the local economy.

A bureaucracy may not seem very efficient to you when you're standing in line for hours, or trying to prove you're actually alive to the person you're talking to when you finally get to the front of that line, but that's only because you have no conception of the size of the problem being solved. Your frustration, as personally debilitating as it may be, is but an undotted *i* in *War and Peace*.

But back to you as the player "looking for" a good group to join. You want a group that won't easily break apart in its environment. The two main attributes you're interested in are (1) size, and (2) strength of internal organization.

Groups

The Principles

Let's set this out "formally" with some basic principles for groups.

- **Group Principle #(-1)**

  I**t's about existence, because it's an existence universe**. Things that don't exist don't matter. Life vs. death is but a sub-case of existence vs. non-existence. A molecule, for example, when it gets broken apart, for whatever reason and to whatever degree, is gone. It's no longer in the game. It *could* reassemble but almost certainly won't. A virtually infinite number of things—both physical and mental—*could* exist, but it's the relatively tiny number of things that *do* exist that matter.

- **Group Principle #(0)**

  Things attach to other things. It could have been a universe without the clumping and snapping, one in which particles raced around crashing into each other occasionally, but

never joining up. But it *isn't* that type of universe; things not only attach, they keep attaching *when*ever and *where*ver they can until they get too big for their britches and fall through a black hole.

- **Group Principle #(1)**

  There's power in numbers. On average—and it's averages that count here—two *cooperating* individuals will out-survive two *independent* individuals. However you want to think about this—as collisions, confrontations, or the gathering and sharing of resources—you can easily intuit how chances are better for the *cooperating* group of two. And it likewise follows that larger groups, on average, out-survive smaller groups.

- **Group Principle #(2)**

  Groups embed. Groups themselves serve as the "individuals in" or the "parts of" groups at the next level up. This is because the internal support systems that serve as the beams and posts of a group become overburdened at some point. The group eventually turns flimsy with just a flat, increasing herd of individuals inside it. It can no longer survive when it comes into contact with groups of its own size that have an extra, strengthening internal layer of subgroups, or "sub-herds", that comprise the herd.

- **Group Principle #(3)**

  How groups embed matters. Second only to its size, the thing that determines whether or not a group survives is how its internal groups are organized and how they cooperate with one another. But there are *infinite* ways of having "groups within groups", and not all those ways are equal in strength. With only our (relatively tiny) human brains and our only-slightly-less-tiny computer systems, it's very hard to say very much at all about what works and what doesn't when groups get large and contain layer upon layer of groupings.

The Shapes that Emerge

In the game, there are mostly just two shapes that emerge, a clumping champion and a snapping champion. The clumping champion is **circular**, or variations thereof—spheres, spirals, ellipses; things like planets and stars and solar systems and galaxies. The snapping champion is **fractal**. Think of a tree with its large trunk supporting a layer of main branches, each of which in turn support smaller, second-layer branches, and so on until you get out to the leaves at the end.

The fractal's the interesting one, of course. The repeating of the same pattern over and over on smaller and smaller scales is extremely simple to implement and it distributes the strength of the pattern down into every level of reality at which the object competes. The fractal shape also optimizes communication up and down the group because its membership numbers expand exponentially through the levels. Which is another way of saying that the fractal is the snapping

champion because it's the most efficient way to fill space in an existence universe, being simple, compact *and* hierarchical.

There's a third, johnny-come-lately, champion shape: **the membrane**. The membrane functions as both armor that protects and container that envelops. Just as individual cells have cell membranes, human bodies have skin, and tanks have hulls. The loose parts on the inside are always agile and can reconfigure quickly.

At the macro level, what emerges is **whirlpools**. From the mighty galaxy twinkling deep in the night sky, to the lonely planets in orbit around the sun, to the fiery storms on Jupiter, to the little dancing dust devil in the road up ahead—everywhere everything is driven into whirlpools.

And this is because nothing is, or can be, perfectly solid in our universe. Deep inside even the diamond, tiny electrons are flitting around. If all that flitting were brought to an absolute halt, at which point you would have a *true* solid, the whole thing would disappear through a black hole. Which means: *the universe is liquid at all points*, just to varying degrees. Mountain ranges are tightly-packed waves of sand rising and crashing across the land just like the tops of oceans are loosely-packed waves of water droplets rising and crashing upon the shore. Mountains are just doing it much more slowly.

All across the ocean that is the universe, the clumping force draws all proximate players in towards local single points, but the inexhaustible built-in locomotion of the players (and groups of players) keeps them from being drawn *directly* into that point. They bend in *towards* it as they pass by, creating the whirlpool effect. Chaos Theory pretty much explains *all* movement in the universe as the interaction of whirlpools, but they call them "attractors".

When we one day finally understand the shape and movement of thoughts in the human brain, no one will be surprised to learn that some mental illnesses involve whirlpools of thought the sufferer can't escape from. Depression will be described as being caught in a hurricane, and a panic attack as being caught in a tornado.

One final note on whirlpools. They all have bottoms, even black holes. Infinities are simply not allowed in the universe, for the same reason they're not allowed in a computer program. Like infinite loops, infinite regresses inextricably trap the logic. When they do, you have to mercy kill the program because it's got its head stuck in a hole you can't extract it from. (Oh, yes, the universe is definitely a computer program. There should be no question about that at this point.)

How the Complexity Grows

At (just about) the lowest level of snapping—at the atomic level—we see that the players snap together with the simple one-to-one, positive-negative, magnetism. The simplest +1 (charged) player group snaps together with the simplest -1 (charged) player group to give us the smallest possible group at the atomic level: the hydrogen atom. The simplest +2 group snaps together with two of the simplest +1 groups, giving us the helium atom, and so on. You might think this could go on forever (like addition in our mathematics does), but at around 95, the group can't survive. It gets out-competed by groups comprised of the other 94. These groups are the same

size as large “95” atoms they smashes to bits. They win because they have a tighter internal structure. We call them molecules.

This pattern repeats over and over again, up through all the levels of reality, all of it driven by size and internal structure. At each level, we get discrete-like building blocks which can be snapped together into bigger and bigger groups composed of *those* building blocks. Each level is eventually tapped out and the strongest groups at that level become the discrete-like building blocks at the next level up.

This never-ending whittling down of the shapes at each level makes reality pseudo-discrete at *all* levels. Hormones, genes, phonemes, neurotransmitters and a million other things serve as higher level “particles” that can be snapped together to build things, or mixed together for use as regulators. The regulation emerges by simply letting the random sloshing about of the “particles” sort things out into a winning/surviving system.

One final point: human beings and human societies are not special in any way. They’re just the groups at our level. All the same simple rules apply in exactly the same ways. We can’t command our particles to *not* snap or to *not* clump. That’s all dictated by size, valence and proximity. Nor can we decide to snap this way, and not that way. It’s all just happening by very well-defined rules. Magnets are magnets. Increasing the *size* of the clumps of the magnets doesn’t change how the *magnetism* works.

The universe is unfolding, blossoming, like a flower. The universe shapes us, and our behavior. Not the reverse. Sorry.

On the upside, the universe is still infinitely fascinating to be a part of. So, you got that going for you, which is nice.

Implications

Continuous Merging and Then a Split

Let’s start with the implication that groups will be driven to continuously merge until everything’s all in one group, and then, if liquid enough, that group will split. The existential pressure to grow will cause the merging, and the disappearance of that pressure (ie, a lone group with no competitors at its level) will cause the splitting.

The back half of that—that groups with no competitors will split—is important to understand. A group that can’t sharpen itself externally must sharpen itself *in*ternally. The environment never stops changing, and like a shark’s ocean, the changing environment must be moved through continuously, and therefore processed, leading inevitably to resource competition, and to groups, and to war. Fight an external enemy or fight an internal one. Those are the only choices. You can’t do neither. Trying to do neither is literally trying to stop time, to stop change. Nobody move and we stop disagreement. Brilliant!

Remember it's not about reasonable humans keeping the peace by coming together in compromise, it about *magnets*. It's about *electricity*. It's not a logic problem. Unless you're talking the logic of magnetism in motion. The logic in our heads is an emergent, incomplete, pathetically shallow *simulation* of logic, just like the earth is a emergent *simulation* of a sphere. Humans can figure out how to not fight wars to the same extent that they can figure out now to not eat so much, or not watch so much porn, or not incessantly look at their phones. You're fooling yourself if you think we've got a logical steering wheel we can point at utopia.

War is Never Going Away

So you see that the continuous merging/splitting dynamic entails that the entire human population is never going to merge into one big (happy) group and stay in it forever and ever and ever. I know this is the humanist dream, and I was lovingly raised on it, but it's not possible. It defies the laws of the universe.

If you disagree with that claim, then the burden of proof is on you to explain how a single worldwide society functions. How does it deal with internal disagreement—without splitting? How does the world enter into a state in which no person in this (single world) society ever becomes motivated to leave it (and thereby become a competitor to it)? What sustains the contentedness equilibrium?

Please don't say "love", but if you have to, then please define love in some non-abstract way. Who gives in to whose desires when? Doesn't it have to be an average between the desires of all the individuals? If so, how is that different from what we have today? And what prevents people from taking extreme positions that pull the average in their direction?

Or if "love" means everyone's desires perfectly converge, or desires themselves are eliminated, how does *that* come about? And how does that survive natural selection?

The sad truth is that the struggle for survival—human vs. human—*doesn't have* an antidote. There is no escape hatch from natural selection. It's simply not possible to carve out a utopia in the type of universe we live in. No matter how hard we try, or how clever we are, we are never going to build a tight little fortress inside the swirling mathematical soup that is our universe.

Now, if we had an alien enemy to fight, that would be different. Then we *could* all be in one group. But then we'd still have war. And the point is that war is never going away. War is how humans *do* groups.

All groups adhere to the same rules regardless of size or member type. The innards of the group may be more complex and more ingenious as the groups get bigger, but that's irrelevant. All that increase in complexity and ingenuity is *shaped* in the same way—in the hang-together-or-hang-alone, (magnetic) *survival* way. We humans are perfect for our environment in cleverly complex ways, but so is everything else for *its* environment, just with a lesser degree of complexity (because they don't need it). We're not special. We don't exist outside or above the rules. Our groups, too, must compete against other groups or be disbanded.

Governments Could Be More Fractal

Let's imagine that we stand outside the universe and can watch it evolve over time and even fast forward it if we like. And as an additional power, we can fork the universe.

Today we've decided to fork it at the signing of the U.S. Constitution. In the new fork, we're allowing you, the reader, to place any text you like into the document that's being signed, and the United States will proceed under your rules in that fork. The goal is to have your forked version of the US survive longer than the actual version when we fast-forward both in parallel. You don't need the *perfect* society, just one that lasts longer. So, what do you write into the Constitution?

Here's what I would do. I would change one tiny thing. I would require that no citizen electing his federal representative be in a pool of voters larger than X, where X is some fixed number. Once the population grew to the point where the number of citizens in congressional districts exceeded X, each district in the country would be required to establish 3 internal, equally-populated sub-districts. Citizens would then vote for their sub-district reps, and those 3 reps (only) would vote for the 1 district rep who goes to Washington.

This is a recursive, fractal solution. Once the population grows to the point where the sub-reps represent more than X constituents, another layer is introduced. Each sub-rep is then elected by 3 sub-sub-reps, who are now the ones elected by the people. The layers of federal representation continuously grow and shrink in sync with the rise and fall of the population.

It may be hard to see why this would work better, but in a universe where there's a fixed number like 435, the individual citizen's vote grows more and more insignificant as the population grows. This produces an increasingly disaffected populace because it fails to appropriately adjust the fineness of resolution on the needs of that populace. Just run the thought experiment out to a population of one trillion. Or one quadrillion. 435 grows more and more and more pathetic as you increase the size of the population. The fractal approach also provides a ladder for any constituent to climb into the seat of power.

Communism is a Loser

My political inclinations have always fallen left of center, but one thing I am fully willing to admit is that the conservatives were 100% correct about communism, where communism is defined in the generic sense of "let's all be equal and share everything".

As appealing as true equality might sound, every time it's been tried—in communes and in countries alike—it has failed catastrophically, and immediately. And it always fails in the same way—to a strongman with a small band of hit men. That's all it takes. That minimal introduction of hierarchy outperforms the flatness of equality.

Communism, as I've defined it, is a seed that quickly dies. It's easy to imagine a world in which someone starts a very small commune, maybe ten people, and, by golly, it works! And so it

grows. And it continues to grow until it takes over the world. This is exactly what happened with capitalism. Capitalism may be vile and heinous from many vantage points, but at least it grows.

I'm not trying to dunk on anyone here—I'm just expressing a "mathematical" opinion on a very specific thing. I'm saying that if you could run a (game theoretical) universe in which one long-running civilization *with* caste/class hierarchies came into first contact with another long-running civilization *without* them, the civilization *with* hierarchy would win the wars. Maybe not every single time, but a preponderance of times. Hierarchy is efficiency (in the right dosage).

You may feel differently about this, and I respect your right to do so. I can't know I'm right, of course, but I would be interested in hearing your explanation of how *lack* of hierarchy wins. How is decision-making not slow? Or if you use technology to make it fast, how are you not ending up the *average* answer to every question? How does the will of the crowd win against a hierarchy of experts? And how is the crowd not overburdened with constant decision making?

Basic Cooperation Universals

Shared Belief Trumps Truth

The last of the group principles (#3) that I posited earlier proclaimed little more than (1) the insides of groups grow in size *and* complexity over time and (2) the growing groups quickly become too complex for humans to reason about well. That being said, there are a couple of basic concepts which are worth discussing because they are so fundamental to the general shape of the emerging complexity of the group.

The first is the primacy of shared belief.

Because each human must individually build his or her own model of the world inside his or her own head, the group's "playing field" for cooperation is defined by the intersection of all the individual models. Things need names, and the names of those things must be kept in sync. If we have different referents for "the big oak tree by the river", then our battle plan that relies on it is at risk. And it's not just the names, but also the specifics of how everything *interacts* with everything else that must be kept in sync. If our battle plan goes sideways after the battle starts, as they usually do, I must be able to anticipate how you will be reacting to the changes in order to coordinate with you. We must possess essentially the same map of reality for this to work.

On average (again), the bigger the intersection that defines that shared model of the world *is*, the better the group's cooperation will be, and the higher the odds of its survival become. **And here's the important and counter-intuitive point: the truth of the model is secondary to the size of the shared overlap in the model.** In other words, it's better to have a falsehood that unites than it is to have a truth that divides.

When Share Belief Shrinks

Consider the liberals and conservatives in the USA today as I write (an early version of) this, in May 2024. Some 30+% of Americans are absolutely convinced the 2020 election was stolen. A

somewhat larger percentage are absolutely convinced it wasn't. These two incompatible models of the world have diverged to such an extent now that both sides fervently believe the other side is knowingly ignoring the facts.

Obviously, one side is wrong about the facts. Either the election was stolen or it wasn't. But do you see how it's more beneficial for the side that's in the wrong to stick together by convincing itself of a falsehood than it is to fracture the group with the truth? And this is as it should be. The #1 priority of a group is not to possess the truth, it's to survive. And the truth doesn't necessarily increase the odds of survival.

If the group with the falsehood is the stronger group *despite* the falsehood, it will defeat the group with the truth. There's no consolation prize for losing with the truth on your side. And there's no point in drowning oneself in moral paroxysms of what should and shouldn't be.

Compromise is the normal give-and-take of a functioning society, and when it can no longer be achieved—because shared truths have grown too far apart—it's the equivalent of cardiac arrest. I understand that there are strong, non-trivial forces working to prevent compromise, and I respect them. But once the divergence of the two shared truths reaches a critical point, things can only be resolved by a splitting of the group. A group that can't cooperate with itself can't function.

Culture is an Attention Focuser

So, getting everyone on *the same page* takes precedence over finding *the right page*. The other deep principle for increasing cooperation is locating all those behaviors that can be performed in multiple equivalent ways—greeting someone, for example—and standardizing them. Doing this makes it easier for everyone to better understand, at a glance and at a distance, the intent of everyone else's behavior. Since we're always unconsciously scanning the world for dangerous behavior, having a strong shared culture helps to dispel false alarms. And that in turn provides us with more and more intimate attention for use in our cooperative tasks. Like building bombs.

Of course, minor cultural diversity is healthy and useful because sometimes what we *thought* was just some arbitrary choice among equivalent alternatives turns out not to be. Sometimes there *is* a better way, and that better way should be given air to breathe—if it's not too disruptive.

Diversity for diversity's sake, however, is *not* good for the group. As we just saw, convergent belief (and behavior) is paramount. The sheeple in our societies do the yeoman's work, keeping most of us on the same page, faithfully following the fashions and passing the memes, *whatever* they may be. And they can be pretty dumb.

So, diversity is great, but only in small doses.

In Summation

It's all about existence. Existence is defined by being attached to something else. Things that are attached to each other are called groups. Groups survive by embedding themselves recursively whenever survival pressure is in force. But once it fails to be, things go in reverse and groups split (if they're not clumped too tightly to manage it). Peerless groups must split because they require competition to keep themselves sharp. A big group that sits around all day with no competition is a blob waiting for the environment to shift in such a way that a smaller, sharper group expands upwards and destroys or swallows it. If a group can't fight on the outside, it must fight on the inside. And it can't *not* fight, or it atrophies itself out of the game.

Therefore, all behavior, all *change*, animate and inanimate, can and should be explained in the context of group survival.

And one last time: human groups are just plain old groups, despite all the free will fanfare. There is no *human* force; and the belief in it is a *religious* belief. There's only the pulling of gravity and snapping of electromagnetism, despite whatever it may feel like inside your head. Zoom out far enough and we're just swarms of fully-robotic ants, bumping heads, touching tentacles, gathering food, building houses, creating offspring; we're just doing it in a slightly larger and more complex survival environment.

Says who? Says that damn Slippin Fall, that's who.

(Slippin Fall says he's *talked* to the ants and, sure enough, they too think they have free will. They *like* to follow each other around in single file like that. They don't *have* to do it that way. They *choose* to do that way—because it the *best* way. And the ants told Slippin Fall to tell you they think you're dumb if you didn't know that already. And to watch your crack.)